## **DRAFT Preliminary Assessment Petition**

Region IX United States Environmental Protection Agency Superfund Division 75 Hawthorne Street San Francisco, California 94105

Under the authority of CERCLA Section 105 (d), as amended, the petitioner

(Name): Orange County Water District

(Address): 18700 Ward Street, Fountain Valley, California 92708

(Telephone Number): (714) 378-3337

Hereby requests that Region IX conduct a preliminary assessment of the suspected release of a hazardous substance, pollutant, or contaminant at the following location:

**Location Description:** The site is located at 1551 East Orangethorpe Avenue, Fullerton, and is currently known as the Fullerton Business Park. The site is located in an industrial area approximately 0.49 miles north of Highway 91, between South Acacia Avenue and Raymond Avenue. Figure 1 is a site location map.

Petitioner is affected by the release because: The groundwater basin that underlies the northern and central portions of Orange County is the source of potable water for more than 20 cities and water agencies that serve more than 2.3 million Orange County residents. Groundwater beneath the northern portion of the Orange County Groundwater Basin (referred to herein as North Basin) has been impacted by Volatile Organic Compounds (VOCs) at concentrations exceeding drinking water standards. Through its enabling legislation, Orange County Water District is responsible for managing groundwater supplies, including water quality, within the entire Groundwater Basin. To date, four water supply wells in the North Basin area have been closed due to VOC contamination, and approximately 10 additional water supply wells are threatened. The impacted areas are associated with chemical releases at multiple long-term industrial sites in the area. At this site, degreasing and etching of circuit boards was performed using chemical solvents. Available soil and soil vapor data collected at the site suggest that this site may be a significant contributor to the North Basin groundwater contamination.

Type or characteristics of the substances involved: Available information indicates that tetrachloroethylene (PCE), trichloroethylene (TCE), and 1,1,1-trichloroethane (1,1,1-TCA) were used at the site. Soil and soil vapor data collected from the mid-1990s to 2010 suggest that these chemicals were also released at the site. These chemicals and their breakdown products have been detected in samples of soil and soil vapor collected at the site.

In spite of the evidence of chemical releases to the subsurface, no groundwater sampling has been conducted onsite by Arnold Engineering or its successors.

Nature and history of any activities that have occurred regarding the release: From approximately 1960 to 1985 the site was occupied by Arnold Engineering. Arnold's operations at the site included etching, stamping, and milling for the electronics industry.

Chemicals used onsite include TCE and 1,1,1-TCA to clean and degrease circuit boards, and PCE to strip circuit boards. Cleaning and stripping the boards was performed in elevated opentop tanks that drained to a neutralization tank, then through subgrade piping to a clarifier. New and spent chemicals were stored at the site.

From 1989 to the present the site has been occupied by multiple tenants, however Arnold Engineering and Integrated Specialties were the only tenants at the site known to have used chlorinated solvents in significant quantities.

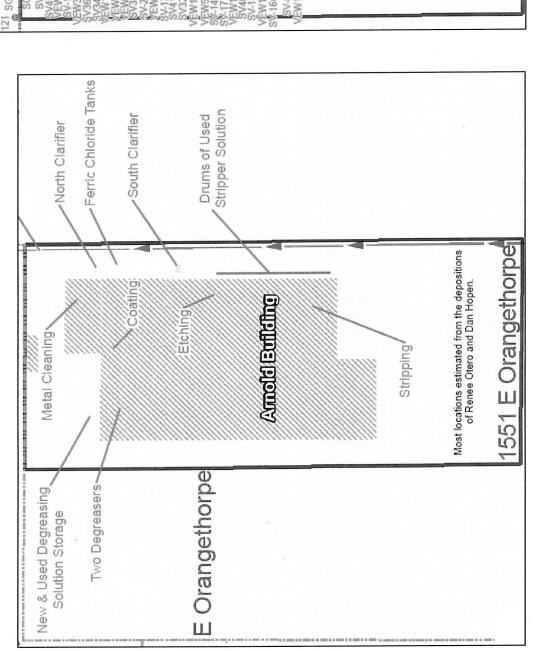
Soil vapor extraction and treatment has been conducted in the north portion of the site (the metal cleaning and degreasing area), but not in the south where chemical stripping was conducted and where spent chemicals were stored.

State and local authorities you have contacted about the release and the response, if any: The Regional Water Quality Control Board's (RWQCB) website (Geotracker) shows the status of this site (referred to on Geotracker as "Fullerton Business Park") as "Case Closed as of 12/19/1995". However the case closure letter from Orange County Health Care Agency dated 15 December 1995 (available on Geotracker) states the presence of residual VOC contamination and potential to impact groundwater had been made known to the RWQCB, but the RWQCB was not requiring groundwater investigation.

The 11 December 1995 letter from the RWQCB to the then-current owner (Red Eagle Properties) stated that they were withdrawing the requirement for Red Eagle Properties to conduct a groundwater investigation, because Red Eagle was not the property owner during the discharges and they were conducting the soil vapor remediation. The letter states however: "Board staff reviewed the results of the soil investigations and determined that TCE, and possibly PCE, may have impacted groundwater."

Any order from the Board to Arnold or its successors to conduct a groundwater investigation at the site has not been posted to Geotracker. Therefore the evidence is that the RWQCB is aware that chemicals have been released at the site and may have impacted groundwater, but has not ordered an investigation.

Figure 3: Facility Features Map and Soil Vapor Extraction Wells



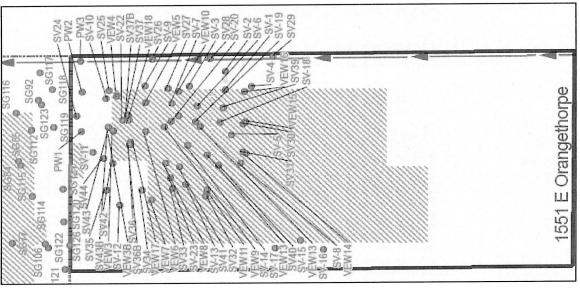


Figure Source: Waddell, 2011

Preliminary Assessment Petition Arnold Engineering Site 1551 East Orangethorpe Avenue, Fullerton, California